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Stryker Overview

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Distribution Statement A: Approved for public release; distribution is unlimited.

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Stryker Family of Vehicles



M1126
Infantry Carrier Vehicle (ICV) - 130



M1135
NBC Reconnaissance Vehicle
(NBCRV) - 3



M1134
Anti Tank Guided Missile (ATGM) - 10



M1127
Reconnaissance Vehicle (RV) - 52



M1128
Mobile Gun System (MGS) - 29



M1129
120mm Mounted
Mortar Carrier (MCV) - 37



M1130
Commander's Vehicle (CV) - 28



M1131
Fire Support Vehicle (FSV) - 14



M1133
Medical Evacuation Vehicle (MEV) - 16



M1132
Engineer Squad Vehicle (ESV) - 13

Commonality
Common Operating Picture
Common Chassis & Drive Train
Common KPP's
Common Survivability
Common TMDE, Spare Parts,
Tools & Skills

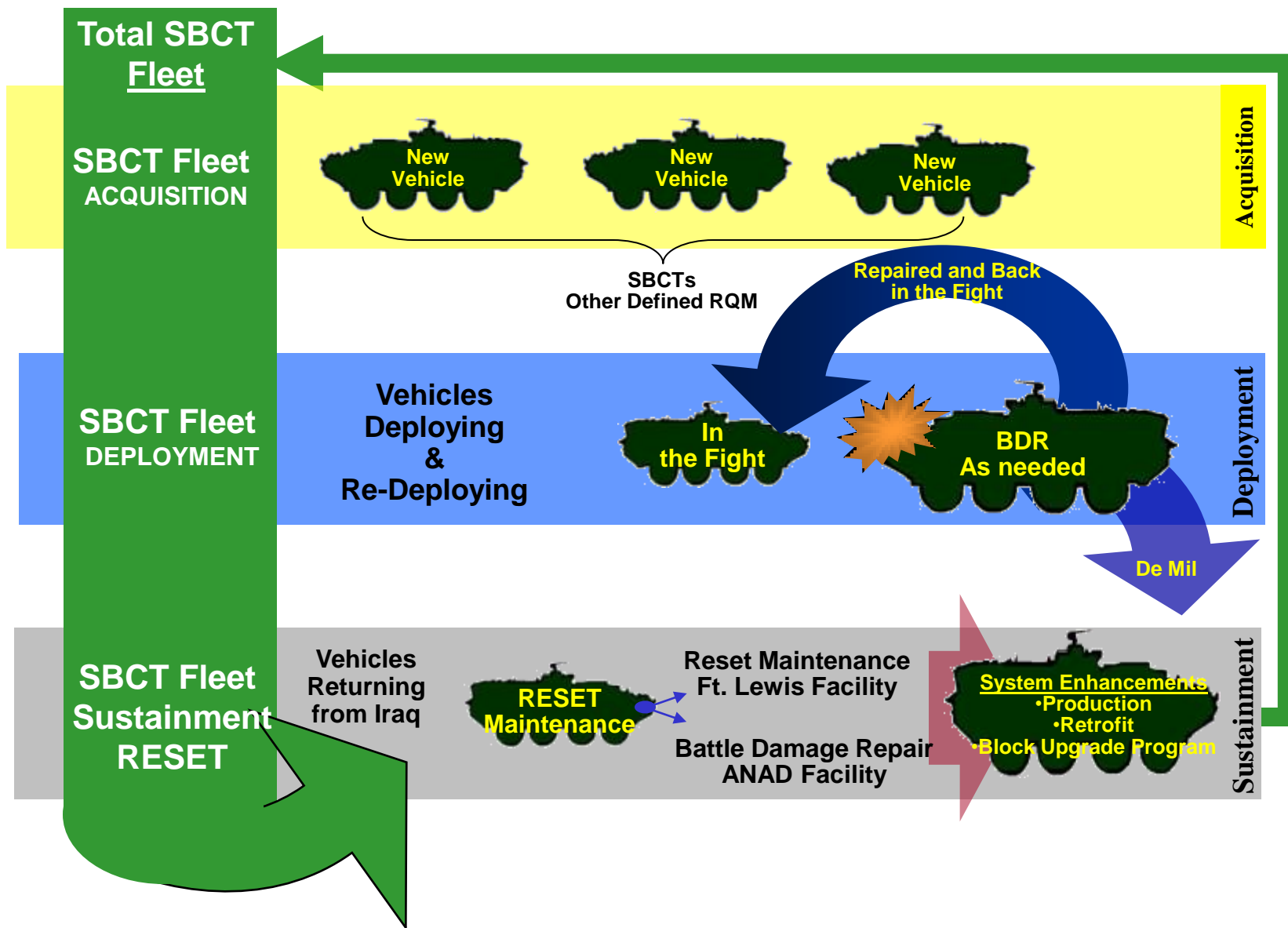
Successful
*Stryker provides enhanced,
Battle-proven capabilities to warfighters*
• Over 24 million miles in Combat
• Currently on 11th SBCT Deployment
• 98% ORR Maintained Since First
Deployed



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SBCT Life Cycle Management





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Stryker Fielding & Program Schedule

Today →

FY09FY10FY11FY12SBCT 1Collective Training/
AvailablePort
OPS

Deployed

Reset

Collective Training/Available

SBCT 2

Reset

Collective Training/
AvailablePort
OPS

Deployed

Reset

Training

SBCT 3

OIF

Reset

Collective Training/Available

SBCT 4

Reset

Port
OPS

Deployed

Reset

Collective Training/Available

SBCT 5

Reset

Collective Training

Port
OPS

Deployed

Reset

Collective
Training/AvailableSBCT 6

OIF

Reset

Training

SBCT 7Collective Training/
AvailablePort
Window
Retrofits

Deployed

Reset

Collective Training/Available

PRODUCTION

Stryker 8

NBCRV

MGS

New Production

FY09 K AWD

FY10 K AWD

FY11 K AWD

NBCRV Production

Reliability Growth Test

NOTE

PH II

MS III

DT Test

MGS Production

CSB

(LRIP) MGS Retrofit

DAB

Development/
Modernization

MGS Long Term Development

Stryker FOV Technology Evaluation & Development

MSB

Systems Development
& Demonstration

MS C

IPR

PDR

CDR

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Supporting the ARFORGEN Process

Current OPS



BDE CONUS/OCONUS

Ft Wainwright, AK
Ft Lewis, WA (3ea BDE)
Schofield Barracks, HI
Vilseck, DE



COMMAND

Warren, MI
Washington D.C.



DEPLOYED BDE

OIF
OEF



PRODUCTION

Anniston Army Depot, AL
Lima, OH
London, Ontario, CA



SPOD/APOD OPS

San Diego, CA, US
Tacoma, WA, US
Honolulu, HI, US
Charleston, SC, US
Beaumont, TX, US
Bremerhaven, DE
Diego Garcia, GB



BATTLE DAMAGE REPAIR

Anniston Army Depot, AL
Qatar



RESET FACILITIES

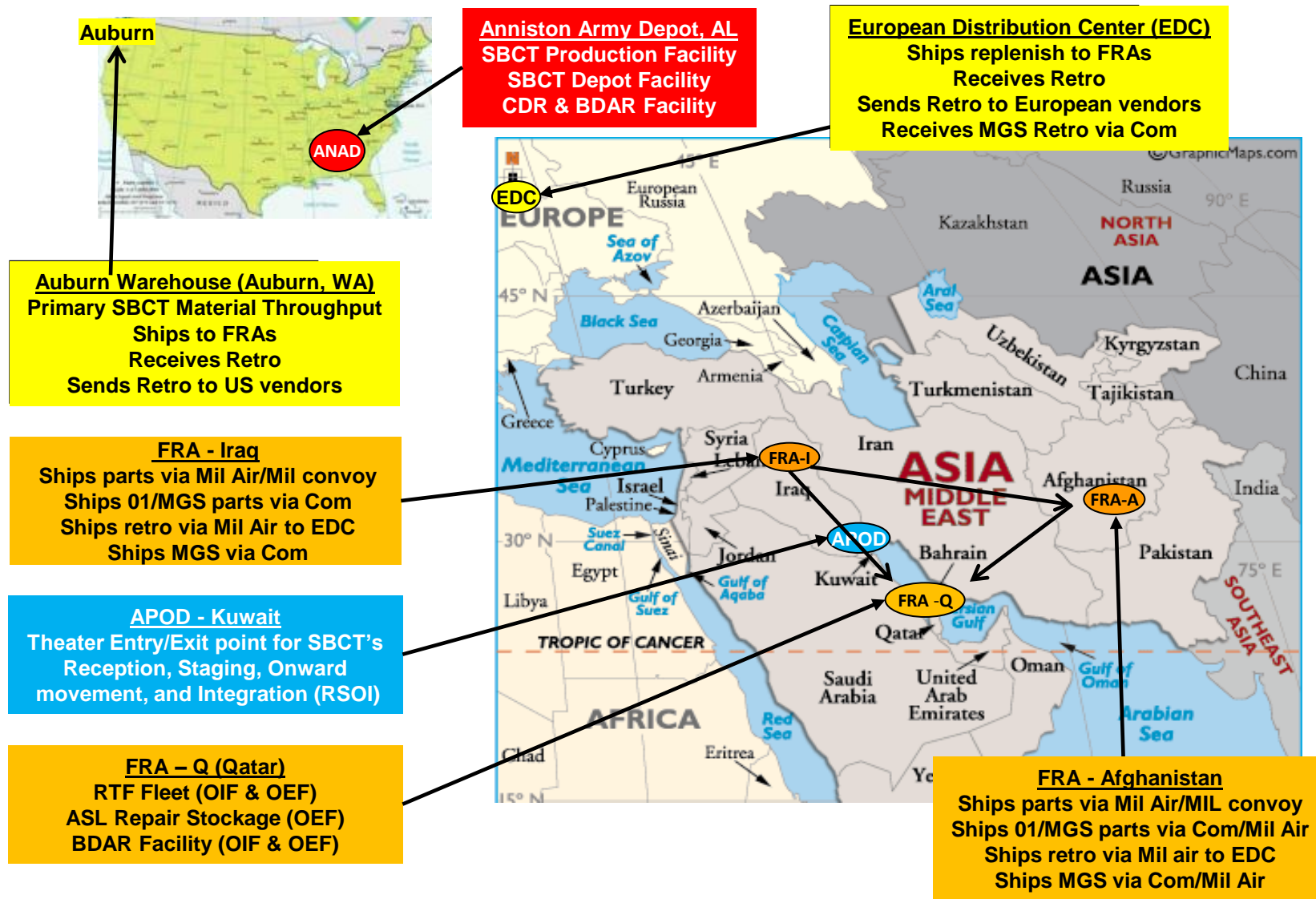
Anniston Army Depot, AL
Ft Lewis, WA
Qatar



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Stryker Support Concept





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“Port Ops” Retrofits



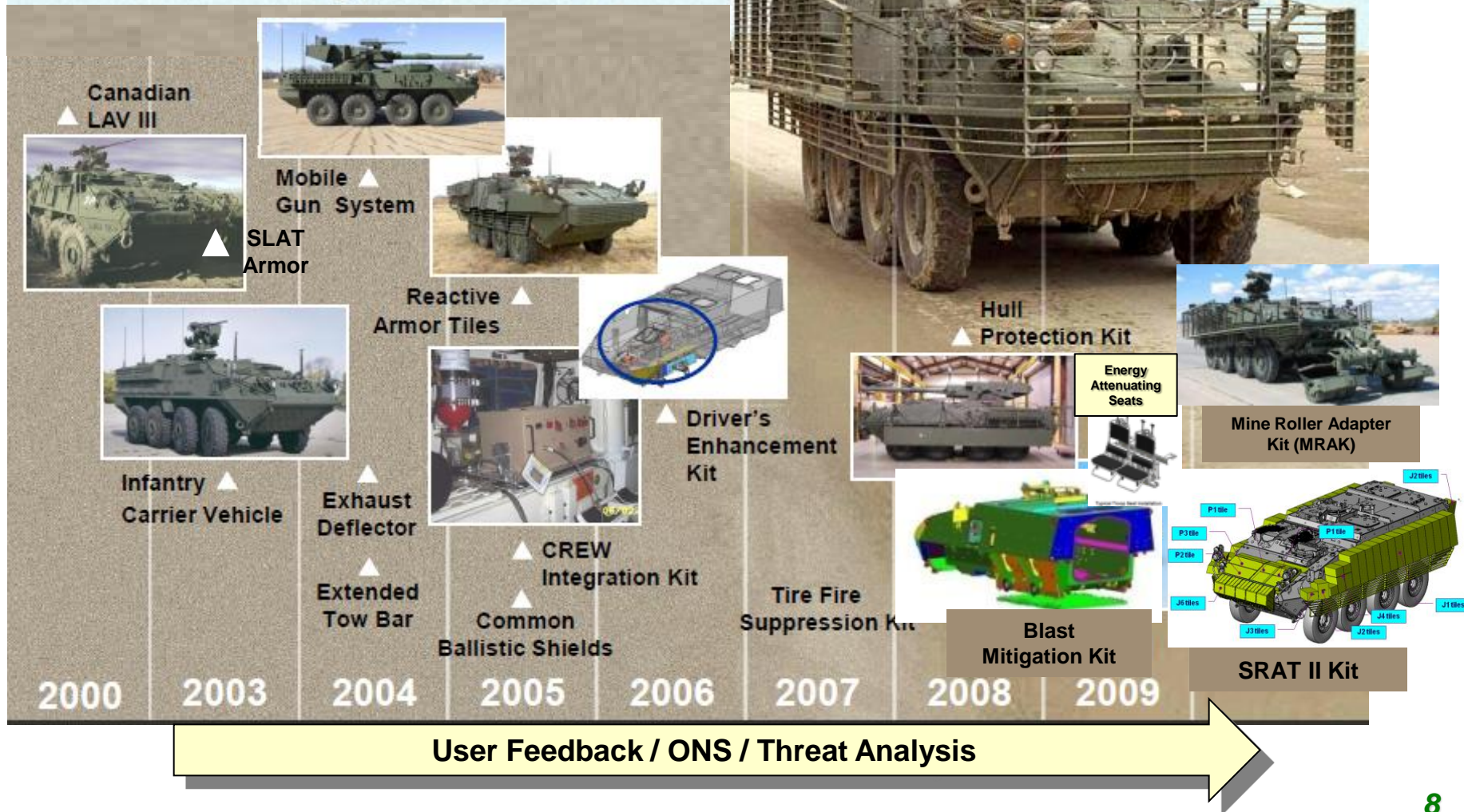


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Support the Warfighter: Response to Evolving Threats

Stryker enhancements provide battle-proven capabilities to the Warfighter



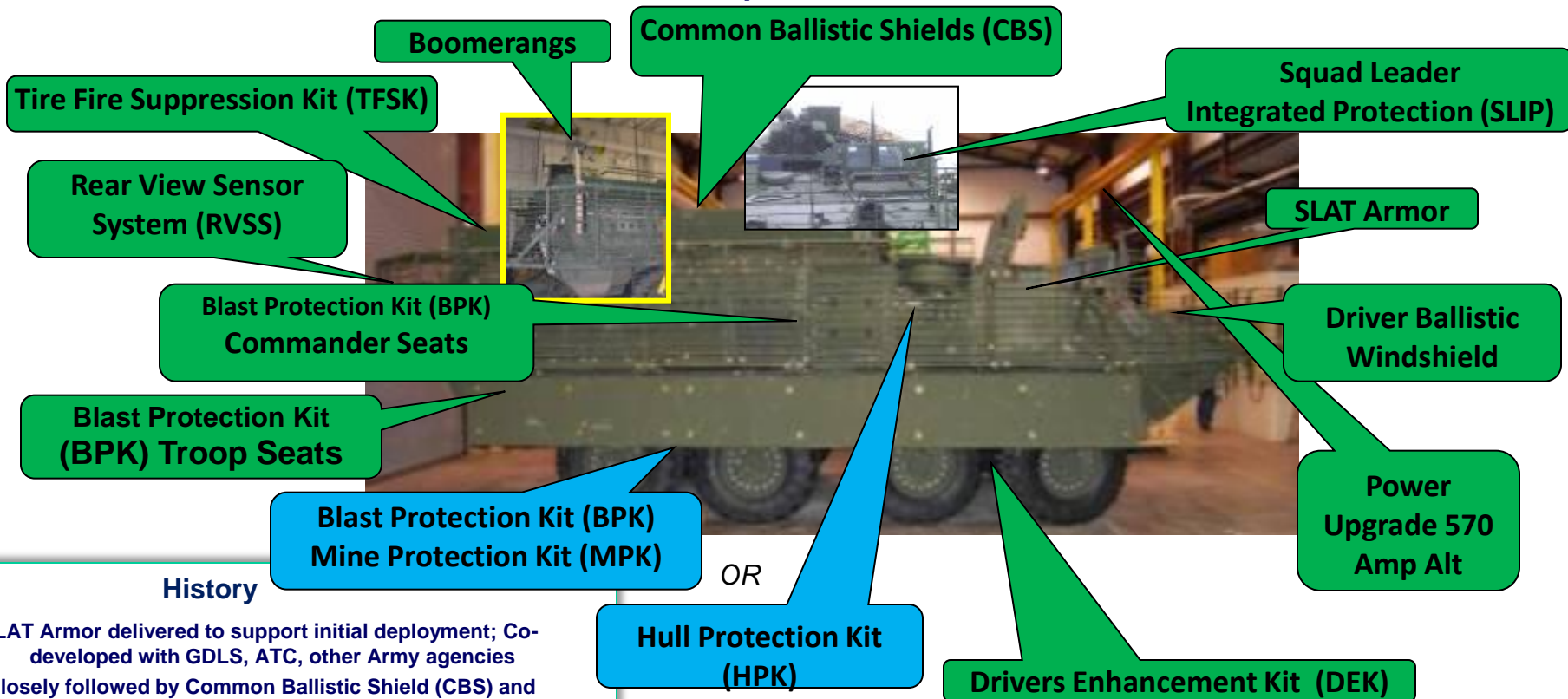


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SBCT 2009 Retrofit Kit Options

- All Strykers in AOR are equipped with 1" Slat, CBS, DEK and CREW.
- SBCT Commanders decide on whether to install Lower Slat Armor, Hull Protection Kit or Blast Protection Kit based on location of operation and threats



History

- SLAT Armor delivered to support initial deployment; Co-developed with GDLS, ATC, other Army agencies
- Closely followed by Common Ballistic Shield (CBS) and integration of electronic jamming with CREW I systems and added Boomerang fire finding capability
- Added lower hull protection through Drivers Enhancement Kit (DEK) and evolved CREW II and enhanced CBS with Squad Leader Integrated Protection kit (SLIP)
- Developed Tire Fires Suppression kit to mitigate soft kills
- Hull Protection Kits as well as Blast Mitigation Kit to address distinctive increases in enemy TTP of IED and buried threat; includes blast mitigating seats as well.



Install either MPK or HPK
Installed Brigade Set

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SBCT C4ISR ONS History 2003-2009

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56th BDE



2009

BFT
OSRVT
WBOTM
TACTICOMP

5/2 BDE



2009

LW
BFT
OSRVT
WBOTM
TACTICOMP

2008

BFT
OSRVT
WBOTM
TACTICOMP

1/25 BDE



2/25 BDE



2007

BFT
OSRVT
TACTICOMP
WBOTM

2SCR



2007

BFT
OSRVT
TACTICOMP
WBOTM

4/2 BDE



2006
LW
BFT
OSRVT

2006

BFT
WBOTM
TACTICOMP

3/2 BDE



2005



172nd BDE

2004

BFT

1/25 BDE



2003

BFT



3/2 BDE

SBCT Deployed



- SBCTs identified 5 key C4ISR capability gaps in their OIF operations.
- All submitted and validated as ONS
- PM SBCT integrated materiel solutions to address these shortfalls.
- Solutions being validated as requirements per the JCIDS process.



The Need to Modernize

POWER



- **Multiple Appliqué solutions added; “Scaleable / Kitable Concept” limited**
- **Kits create both interior & exterior challenges for each carrier variant**
 - **CREW, GSS/MSS, Armor Upgrades**
 - **Additional displays/screens**
 - **2nd/3rd order effects include weight and power**

[illegible]

- = Operator at or below suspension/drive-line nominal design load
- = Validated operation above design load
- = Degraded mobility/reliability/unknown

Stryker Driveline Verified for 42,000 lb GVW Deviated safely to 48,000-lb

- **Kits required to address threats**
 - **IED, RPG, EFP, Sniper, etc**
- **Only select Kits can be applied**
- **Deployed configuration weighs more than planned**
- **Limit Mobility**

Variant	NOB	NBOV	OV	F2V	IOV	RV	MEV	EBV	ATOM	MOV
Alternator Nominal	400	400	400	400	400	400	400	400	400	400
Power available @ highload	400	315	400	400	400	400	400	400	400	400
Base Load (system covered up to 100% active)	0	0	0	0	0	0	0	0	0	0
Typical rating in OF (at 100% active)	315	315	315	315	315	315	315	315	315	315
Future loads	0	0	0	0	0	0	0	0	0	0

Green: no power needed

Yellow: reserve power available

Red: power needed up to 100%

Reference:

Design = 100%
 Area = 20%
 Monitoring = 5%
 Control room = 5%

Assumptions:

100% of the full power Base
 capacity = NOB, Base max
 = NOB
 100% of the
 Base Capacity
 = NOB
 100% of the
 Base Capacity

Additional Notes:

100% of the full power Base
 capacity = NOB, Base max
 = NOB
 100% of the full power Base
 capacity = NOB, Base max
 = NOB

The 100% of the full power Base capacity is not available up to 100% of the full power Base capacity.

- OIF kit loads require some systems to be turned off
- Current Power Generation cannot meet expected future loads
- Silent watch capability impacted
- Excess heat impacts both onboard electronics and Soldier's effectiveness

Current Space, Weight, and Power Capacity Shortfalls require Upgrades to Stryker FoV



Balancing Capabilities

(S-MOD Systems Engineering Process)

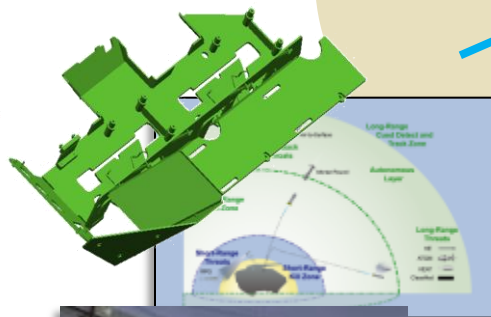
Lethality/Survivability

Transportability

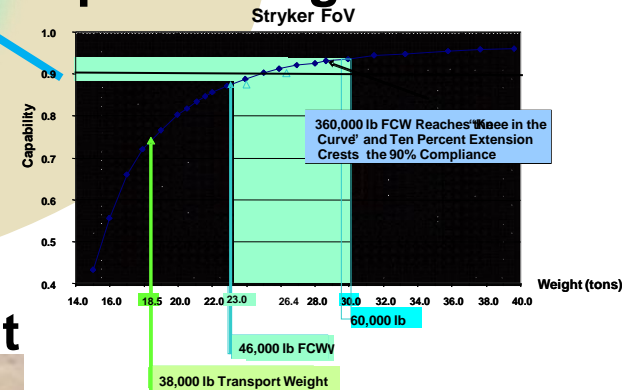
Mobility



Survivability



Space/Weight/Power



C4ISR

Sustainment



Comprehensive System Design Results in Balanced Technical Approach

QUESTIONS

